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CFETP 1A5X1  
Parts I-II  
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**AFSC 1A5X1**  
**Airborne Mission Systems Specialty**



**CAREER FIELD**  
**EDUCATION AND TRAINING PLAN**  
**(CFETP)**

**CAREER FIELD EDUCATION AND TRAINING PLAN  
AIRBORNE MISSION SYSTEMS SPECIALTY  
AFSC 1A5X1**

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**AIRBORNE MISSION SYSTEMS SPECIALTY  
AFSC 1A5X1  
CAREER FIELD EDUCATION AND TRAINING PLAN**

**Part I**

***Preface***

1. This Career Field Education and Training Plan (CFETP) is a comprehensive education and training document that identifies life-cycle education/training requirements, training support resources, and minimum core task requirements for this specialty. The CFETP will provide personnel a clear career path to success and instills rigor in all aspects of career field training.

2. The CFETP consists of two parts; both parts of the plan are used by supervisors to plan, manage, and control training within the career field.

2.1. Part I provides information necessary for overall management of the specialty. Section A explains how everyone will use the plan; Section B identifies career progression information, duties and responsibilities, training strategies, and career field path; Section C associates each level with specialty qualifications (knowledge, education, training, and other); Section D indicates resource constraints. Some examples are funds, manpower, equipment, and facilities. Note: AFMAN 36-2108, *Airman Classification*, contains the specialty descriptions.

2.2. Part II includes the following: Section A identifies the Specialty Training Standard (STS) and includes duties, tasks, technical references to support training, Air Education and Training Command (AETC) conducted training, wartime course, core tasks, and correspondence course requirements; Section B contains the course objective list and training standards supervisors will use to determine if airmen satisfied training requirements; Section C identifies available support materials. An example is a qualification training package (QTP) which may be developed to support proficiency training. QTPs identified in this section have been developed to support upgrade/qualification training. These packages are identified in AFIND 8, *Numerical Index of Specialized Educational Training Publications*; Section D identifies a training course index, which are used to determine resources available to support training. Included here are both mandatory and optional courses; Section E identifies MAJCOM unique training requirements.

3. This CFETP is designed to ensure individuals in AFSC 1A5X1 receive comprehensive and effective training at the appropriate phases of their career. At unit level, supervisors and trainers use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.

***ABBREVIATIONS/TERMS EXPLAINED***

**Advanced Training.** Formal course which provides individuals who are qualified in one or more positions of their Air Force Specialty (AFS) with additional skills/knowledge to enhance their expertise in the career field. Training is for selected career airmen at the advanced level of the AFS.

**Air Force Career Field Manager (AFCFM).** Individual appointed by Air Staff DCS's to manage education, training, and resources for a specific career field(s).

**Basic Aircraft Qualification (BAQ).** An aircrew member who has satisfactorily completed initial qualification training and is qualified to perform aircrew duties in the unit aircraft.

**Basic Mission Capable (BMC).** An aircrew member who has satisfactorily completed mission qualification training, does not maintain MR/CMR status, but maintains familiarization in the command or unit operational mission.

**Combat Mission Ready (CMR).** An aircrew member who has satisfactorily completed mission qualification training and maintains qualification and proficiency in the command or unit operational mission.

**Continuation Training (CT).** Additional training exceeding requirements with emphasis on present or future duty assignments.

**Core Task.** A task AFCFMs identify as essential qualification requirements for upgrade within an AFS. These tasks exemplify the essence of the career field--the foundation. Failure to complete core tasks precludes upgrade. Core tasks not applicable to MAJCOMs are waivable by MAJCOM functional managers.

**Course Objective Lists (COL).** A publication, derived from our initial skills course training standard, identifying the tasks and knowledge requirements, and respective standards provided to achieve a 3-skill level in this career field. Supervisors use the COL to conduct graduate evaluations in accordance with AFI 36-2201, *Developing, Managing, and Conducting Military Training Programs*.

**Course Training Standard (CTS).** A training standard identifying the training members will receive in a specific course.

**Enlisted Specialty Training.** A mix of formal training (technical school) and informal enlisted (OJT) training (life cycle) to qualify and upgrade airmen in each skill-level of a specialty.

**Initial Skills Training.** A formal school course that results in an award of a 3-skill level AFSC.

**Initial Qualification Training (IQT).** A training course needed to qualify for basic aircrew duties in an assigned position, for a specific aircraft, without regard for the unit's operational mission.

**Instructional System Development (ISD).** A deliberate and orderly, but flexible process for planning, developing, validating, implementing, and reviewing instructional programs. It ensures personnel are taught, in a cost efficient way, the knowledge and skills for successful job performance.

**Major Weapons Systems (MWS).** All applicable airborne platforms with a crew complement including at least one 1A5X1.

**Mission Ready (MR).** See **Combat Mission Ready (CMR)**

**On-the-Job Training (OJT).** Hands-on, over-the-shoulder training conducted to certify personnel in both upgrade (skill level award) and job qualification (duty position certification) training.

**Phase I (IQT).** Training necessary to initially qualify a crew member in a basic crew position and flying duties without regard to the unit's operational mission. This is the minimum requirement for BAQ.

**Phase II (MQT).** Training necessary to qualify a crew member in a specific aircrew position to perform the command's or unit's operational mission. MQT completion is a prerequisite for CMR

**Phase III (CT).** Training for aircrew members already qualified in their respective aircrew position to maintain their assigned level of proficiency. CT is designed to progressively improve basic aircraft qualification, combat mission ready, basic mission capable, and aircrew members' ability to perform the unit's mission.

**Practicum.** A means of receiving college credits through Community College of the Air Force (CCAF) Teaching Technology Associates Degree Program for formal school house instructors which covers a wide variety of subjects beyond initial instructor qualification.

**Qualification Training.** Actual hands-on task performance training designed to qualify an aircrew member in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skill/knowledge training required to do a job.

**Qualification Training Package (QTP).** An instructional course designed for use at the unit to qualify, or aid qualification, in a duty position or program, or on a piece of equipment. It may be printed, computer based, or in other audio visual media.

**Resource Constraints.** Resource deficiencies, such as funds, facilities, time, manpower, and equipment that preclude desired training from being delivered.

**Specialized Training Package and COMSEC Qualification Training Package.** A composite of lesson plans, test material, instructions, policy, doctrine, and procedures necessary to conduct training. These packages are prepared by AETC, approved by the National Security Agency (NSA), and administered by qualified COMSEC maintenance personnel.

**Specialty Training Standard (STS).** An Air Force publication that describes an AFS in general terms of tasks and knowledge that an airman in that specialty may be expected to perform or to know on the job. It further serves as a contract between AETC and the functional user to show which of the overall training requirements for an AFSC are taught in formal schools and correspondence courses.

**Standard.** An exact value, a physical entity, or abstract concept, established and defined by authority, custom, or common consent to serve as a reference, model, or rule in measuring quantities or qualities, establishing practices or procedures, or evaluating results. A fixed quantity or quality.

**Total Force.** The collective components (active, reserve, guard, and civilian elements) of the United States Air Force.

**Upgrade Training (UGT).** Training that leads to the award of a higher skill level in an AFS.

**War Task.** Tasks that AFS functional managers identify as minimum qualification requirements trained in-resident wartime course.

**Weapons System Training Package (WSTP).** An instructional course which includes IQT, MQT, and CT designed for use at the unit to qualify or aid qualification in a duty position, program, or on equipment. It may be printed, computer-based, flying, simulator, or other audio visual material.

## ***Section A - General Information***

**1. Purpose.** This CFETP provides information necessary for the Air Force Career Field Manager (AFCFM), MAJCOM functional managers (MFMs), commanders, training managers, supervisors, and trainers to plan, develop, manage, and conduct an effective and efficient career field training program. The plan outlines the training that individuals must receive in order to develop and progress throughout their career. For the purpose of this plan, training is divided into four areas: initial skills, upgrade training (UGT), qualification training (QT), and continuation training (CT). Initial skills training is the Air Force Specialty specific training an individual receives upon entry into the Air Force or upon retraining into this specialty for award of the 3-skill level. Upgrade training identifies the mandatory courses, task qualification requirements, and correspondence course completion required for award of the 3-, 5-, 7-, and 9-skill levels. Qualification training is actual hands-on task performance training designed to qualify an airman in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skills/knowledge training required for the job. Continuation training is additional training either in-residence or exportable advanced training courses, or on-the-job training, provided to personnel to increase their skills and knowledge beyond the minimum required. The CFETP has several purposes, some are:

- 1.1. Serves as a management tool to plan, manage, conduct, and evaluate a career field training program. Also, it is used to help supervisors identify training at the appropriate point in an individual's career.
- 1.2. Identifies task and knowledge training requirements for each skill level in this specialty and recommends education/training throughout each phase of an individual's career.
- 1.3. Lists training courses available in the specialty, identifies sources of training, and the training medium.
- 1.4. Identifies major resource constraints that impact full implementation of the desired career field training program.

**2. Uses.** The plan will be used by MFMs and supervisors at all levels to ensure a comprehensive and cohesive training programs are available and/or instituted for each individual in the specialty.

2.1. AETC training personnel will develop/revise formal resident, non-resident, field and exportable training based on requirements established by the user and documented in Part II of the CFETP. They will also work with the AFCFM to develop acquisition strategies for obtaining resources needed to provide the identified training.

2.2. MFMs will ensure their training programs complement the CFETP mandatory initial and upgrade skills requirements. OJT, resident training, contract training, or exportable courses can satisfy identified requirements. MAJCOM-developed training to support this AFSC must be identified for inclusion in this plan and must not duplicate available training resources

2.3. Each individual will complete the mandatory training requirements specified in this plan. The list of courses in Part II will be used as a reference to support training.

2.4. AETC, MAJCOM functional managers, and/or unit training managers develop qualification training packages (QTP). Unit developed QTPs will be provided to the parent MAJCOM and included in the CFETP.

2.5. Personnel in AFSC 1AXXX are exempt from maintaining OJT Training Folders (AF Form 623). All core tasks identified in this document are satisfied in IQT, MQT, and CT. That training is certified via AF Form 8 by trained instructors and evaluators. Certification of the Form 8 eliminates the requirement to document STS items in this CFETP.

**3. Coordination and Approval.** The AFCFM is approval authority. MAJCOM representatives and AETC training personnel will identify and coordinate on the career field training requirements. The AETC training manager for this specialty will initiate an annual review of this document by AETC and MFMs to ensure currency and accuracy. Using the list of courses in Part II, they will eliminate duplicate training. Applicable inputs/changes to this CFETP will be routed to 332 TRS/TRR, 613 Hangar Rd, Keesler AFB MS 39534-2237.

## ***Section B - Career Progression and Information***

### **4. Specialty Description.**

**4.1. Specialty Summary.** Operates, monitors, inspects, tests, maintains, optimizes and evaluates surveillance radar, computer, networks, display, identification friend or foe (IFF), passive detection systems, and ancillary systems equipment. Supervises and manages airborne mission system operation. Related DoD Occupational Subgroup: 150.

### **4.2. Duties and Responsibilities.**

4.2.1. Inspects and performs flight duties on radar, computer, display, passive detection systems, IFF and ancillary equipment. Performs airborne equipment maintenance, and pre-flight, in-flight, and post-flight inspections. Performs initial power-on and testing of mission systems equipment. Plans, organizes, and coordinates mission systems activities. Prepares reports on operating, maintaining, and repairing airborne missions systems equipment.

4.2.2. Operates, monitors, maintains, and tests radar, computer, display, IFF, passive detection systems, and ancillary equipment to achieve optimum performance. Isolates malfunctions using visual inspections, special test equipment, built-in-test, fault-isolation-test, built-in-equipment, and diagnostic software routines. Monitors warning and failure indicators and lights for cooling loss, equipment overheat, and system failure. Removes and replaces defective components. Makes system adjustments using applicable software and technical order procedures. Directs personnel in operating and maintaining airborne mission systems. Advises and assists personnel on techniques for optimum equipment operation. Provides direction and assistance for assigned personnel to maintain work standards.

4.2.3. Establishes, supervises, and directs aircrew training. Develops and directs instruction in equipment operation and troubleshooting. Ensures standardized procedures are used to teach in-flight equipment operation, maintenance, and repair. Determines need for specific instruction, and establishes training programs on mission systems.

4.2.4. Evaluates airborne mission systems operation and maintenance activities. Evaluates compliance with technical manuals, regulations, and work standards. Serves on or directs airborne mission systems inspection teams to evaluate in-flight maintenance and operational programs. Interprets inspection reports and prescribes corrective actions.

4.2.5. Manages operating and maintenance functions. Maintains operational inspection and maintenance records and documents. Reviews unusual and difficult problems in operation and in-flight maintenance of equipment. Recommends methods, techniques, and procedures to enhance maintenance and operational capabilities, and improve mission system options. Advises on mission systems operation and maintenance, and coordinates on research and development projects.

**5. Skill/Career Progression.** Adequate training and timely progression from the apprentice to the superintendent skill level play an extremely important role in the Air Force's ability to accomplish its mission. Therefore, it is essential that everyone involved in training do their part to plan, develop, manage, conduct, and evaluate an effective and efficient training program. The guidance provided in this part of the CFETP will ensure individuals receive viable training at the appropriate points in their career. The following narrative and the 1A5X1 flow charts identify the training career path. They define the training required in an individual's career.

**5.1. Apprentice (3) Level.** Initial skills training in this specialty consists of the tasks and knowledge training provided in the 3-skill level resident course (1A531) located at Keesler, AFB MS. Tasks and knowledge training requirements are identified in the specialty training standard, at Part II, Section A. Individuals must complete the initial skills course to be awarded AFSC 1A531.

**5.2. Journeyman (5) Level.** Upgrade training to the 5-skill level in this specialty consists of task and knowledge training provided in Career Development Course (CDC) 1A551, and hold appropriate grade.

**5.3. Craftsman (7) Level.** Upgrade training to the 7-skill level in this specialty consists of task and knowledge training provided in Career Development Course (CDC) 1A571, hold grade of SSgt, and 18 months of OJT.

**5.4. Superintendent (9) Level.** Must be a SMSgt and have completed SNCOA or its equivalent.

**6. Training Decisions.** The CFETP uses a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the Airborne Mission System Specialty. This CFETP was developed to include life-cycle (day one through retirement) training requirements for this specialty. The spectrum includes a strategy for when, where, and how to meet the training requirements. The strategy must be apparent and affordable to reduce duplication of training and eliminate a disjointed approach to training.

**6.1. Initial Skills Training.** The initial skills training will be revised to provide training needed to prepare graduates for Airborne Mission System specialty related positions.

**6.2. Five Level Upgrade Training.** The AFSC 1A551 CDC provides required training for upgrade in the Airborne Mission System specialty related positions.

**6.3. Seven Level Upgrade Training.** The CSAF has approved a variance, eliminating the requirement for in-residence 7-level training for all 1AXXX (Air Operations Career Field ) personnel.

**7. Community College of the Air Force .** Enrollment in CCAF occurs upon completion of basic military training. Off-duty education is a personal choice but is highly encouraged. CCAF provides the opportunity to obtain an Associates in Applied Sciences Degree. Contact the local education officer for current course information.

**7.1. Occupational Instructor Certification.** Upon completion of instructor qualification training, consisting of the instructor methods course and supervised practice teaching, CCAF instructors who possess an associates degree or higher may be nominated by their school commander/commandant for certification as an occupational instructor.

**7.2. Trade Skill Certification.** When a CCAF student separates or retires, a trade skill certification is awarded for the primary occupational specialty. The College uses a competency based assessment process for trade skill certification at one of four proficiency levels: Apprentice, Journeyman, Craftsman/Supervisor, or Master Craftsman/Manager. All are transcribed on the CCAF transcript.



**7.3. Degree Requirements.** All airmen are automatically entered into the CCAF program and must hold a 5 skill level at the time of program completion. The 1999-2001 CCAF Catalog degree program for AFSC 1A5 is Avionic Systems Technology. The 2002 catalog update will change this to Airborne Information Systems in keeping with changes in the AFSC.

Subject Area	Semester Hrs
Technical Education	24
Leadership, Management, and Military Studies	6
Physical Education	4
General Education	15
Program Elective	15
Total	<b>64</b>

**7.3.1. Technical Education (24 Semester Hours):** Twenty-four semester hours are required to fulfill the technical education requirement. Twelve semester hours must be applied from technical core course with the remaining 12 applied from either technical core or technical elective course. Requests to substitute subjects/courses must be approved in advance by the Technical Branch at CCAF.

**7.3.2. Leadership, Management, and Military Studies (6 Semester Hours):** Professional military education and/or civilian management courses.

**7.3.3. Physical Education (4 Semester Hours):** This requirement is satisfied by completion of Basic Military Training. PHE 1000.

**7.3.4. General Education (15 Semester Hours):** Applicable courses must meet the criteria for application of courses to the General Education Requirement (GER) and be in agreement with the definitions of applicable general education subject/courses as provided in the CCAF general catalog.

**7.3.5. Program Elective (15 Semester Hours).** Satisfied with applicable technical education; leadership, management, and military studies; or general education subjects/courses, including natural science courses meeting GER application criteria and foreign language credit earned at the Defense Language Institute or through the Defense Language Proficiency Test. Six semester hours of CCAF degree-applicable technical credit otherwise not applicable to this program may be applied.

**7.4.** Additional off-duty education is a personal choice that is encouraged for all. Individuals desiring to become an Air Education and Training Command Instructor should be actively pursuing an associate's degree. A degreed faculty is necessary to maintain accreditation through the Southern Association of Colleges and Schools.

## **8. Flow Charts.**

Figure 1. Enlisted Career Path

Figure 2. 1A5X1 Training Flow

Figure 3. E-3 U.S. and NATO Training Flow

Figure 4. E-8 JSTARS Training Flow

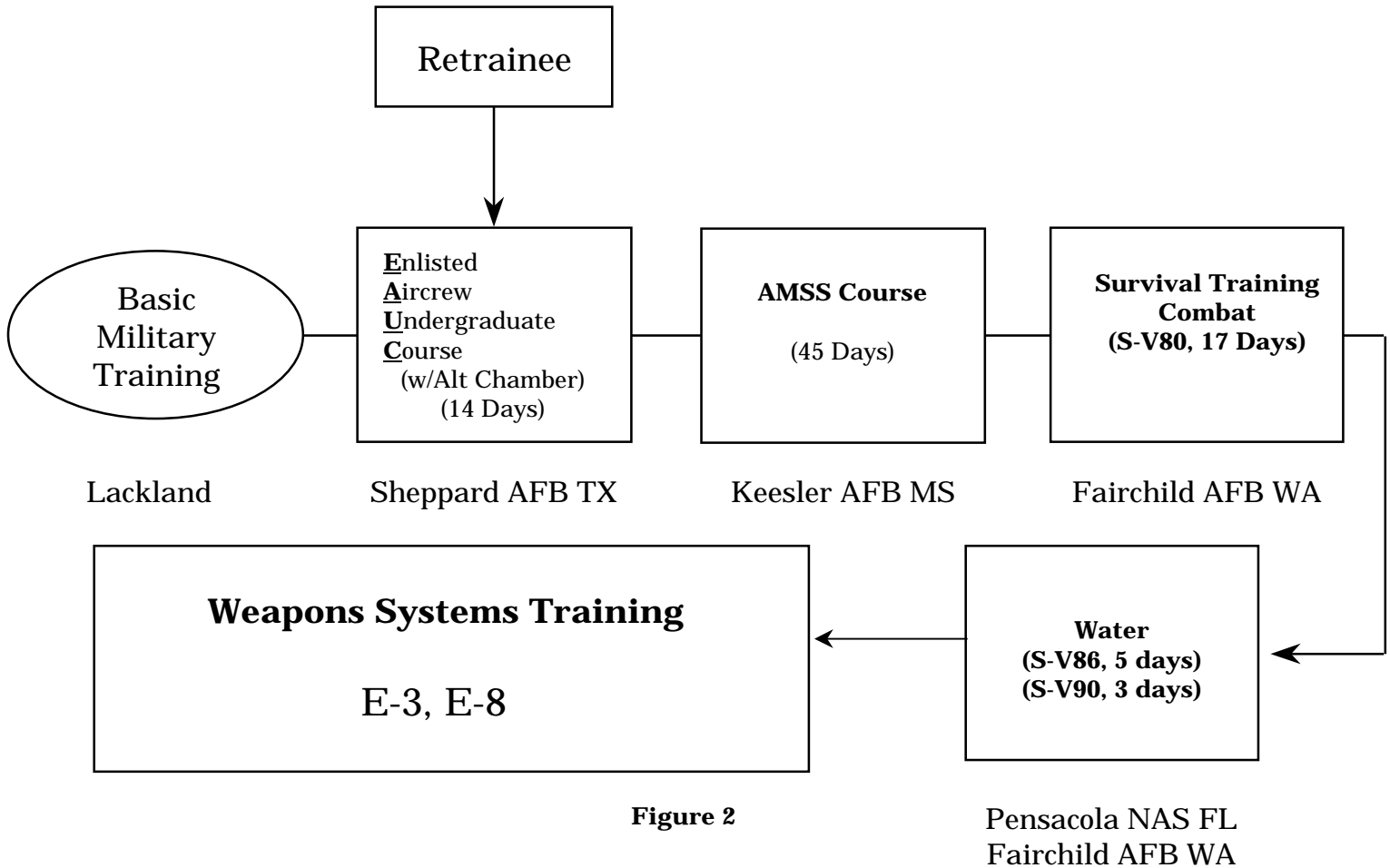
Figure 5. 1A5X1 Assignment Locations

### Enlisted Career Path

Education and Training Requirements	GRADE REQUIREMENTS				
	Rank	Earliest Sew-on	Air Force Average	1A5X1 Average	High Year of Tenure (HYT)
<b>Basic Military Training School</b>					
<b>Apprentice Technical School (3-Skill Level)</b>	Amn A1C	6 months 16 months			
<b>Upgrade To Journeyman (5-Skill Level)</b> - Complete 3 months duty position and apprentice experience before beginning journeyman training. - Minimum 15 months on-the-job training. - Complete appropriate CDC.	SrA	28 months	3 years	3 years	10 years
<b>Airman Leadership School (ALS)</b> - Must be a SrA with 48 months time in service or be a SSgt selectee. - Resident graduation is a prerequisite for SSgt sew-on (Active Duty Only).					
<b>Upgrade To Craftsman (7-Skill Level)</b> - Minimum rank of SSgt select - 18 months OJT - Formal advanced skill training. - Must be 7-skill level for TSgt sew-on.	SSgt	3 years	5.4 years	5.2 years	20 years
<b>Noncommissioned Officer Academy (NCOA)</b> - Must be a TSgt or TSgt selectee. - Resident graduation is a prerequisite for MSgt sew-on (Active Duty Only).	TSgt	5 years	13.9 years	12.7 years	20 years
	MSgt	8 years	16.7 years	16.6 years	24 years
<b>USAF Senior NCO Academy (SNCOA)</b> - Must be a SMSgt or SMSgt selectee. - Resident graduation is a prerequisite for CMSgt sew-on (Active Duty Only).	SMSgt	11 years	19.3 years	21.9 years	26 years
<b>Upgrade To Superintendent (9-Skill Level)</b> - Minimum rank of SMSgt. - Must be a resident graduate of SNCOA (Active Duty Only). (or sister service senior academy)	CMSgt	14 years	21.3 years	23.0 years	30 years
<b>Data current as of Jan 01</b>					

Figure 1

## 1A5X1 Training Flow



**Figure 2**

8.1. The flow outlined in figure 2 (above) represents the formal training courses required for personnel entering and becoming fully qualified in the Airborne Mission System Specialty. The locations, course lengths, and titles are subject to change. Changes will be updated in the Education and Training Course Announcements (ETCA) formerly (AFCAT 36-2223) by the course owner.

8.1.1. The course flow has been developed and agreed upon by the MAJCOM functional managers to minimize days students are awaiting training and to ensure survival training is received prior to AFSC award--minimizing the impact of not having the prerequisites completed before entering weapons system training.

8.1.2. Personnel graduating from the Keesler course are awarded AFSC 1A531 and are authorized to wear the Basic Aircrew Member Badge. The badge is not awarded permanently until the individual completes Initial Qualification Training at any of the weapons systems qualification courses. Failure to complete IQT is authority for supervisors to recommend revocation of wear of the aircrew member badge.

### E-3 U.S. and NATO AWACS Training Flow

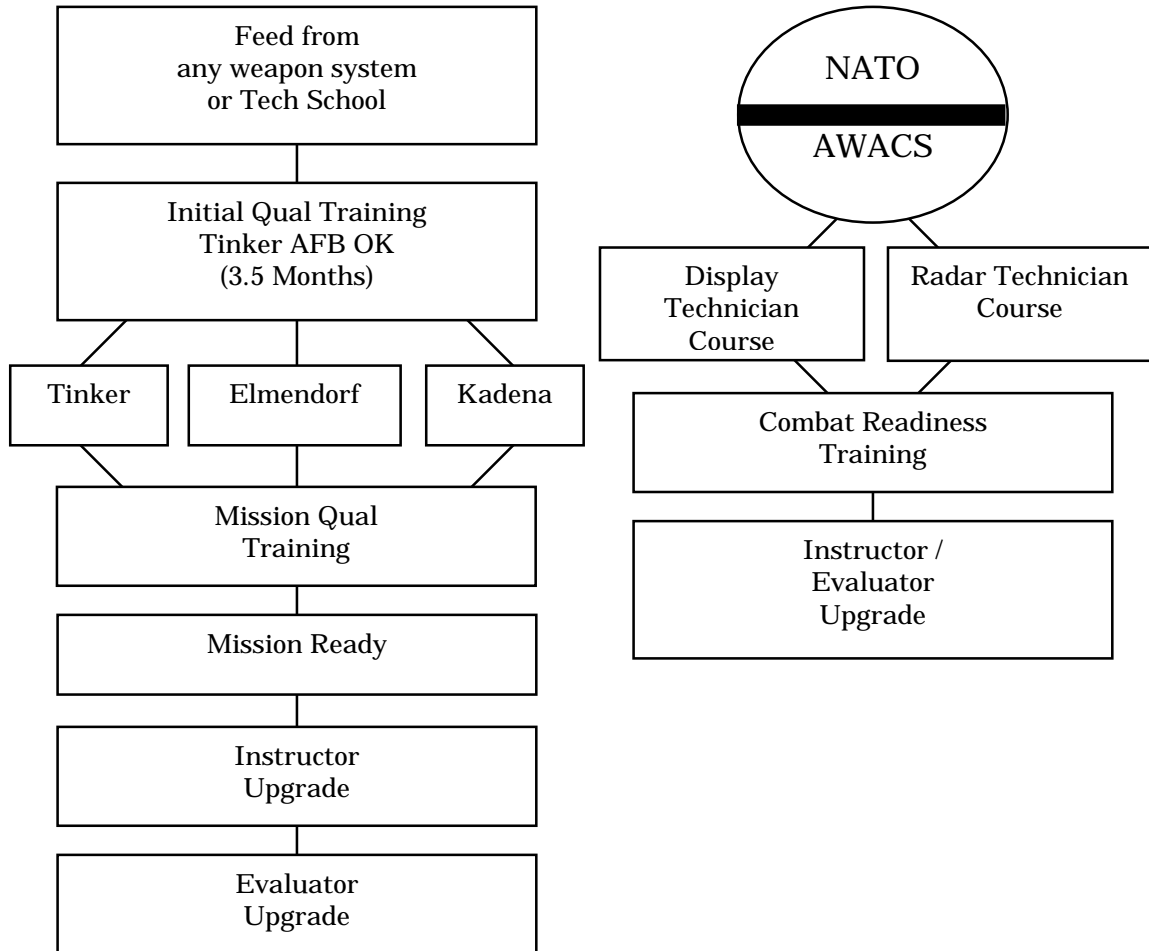
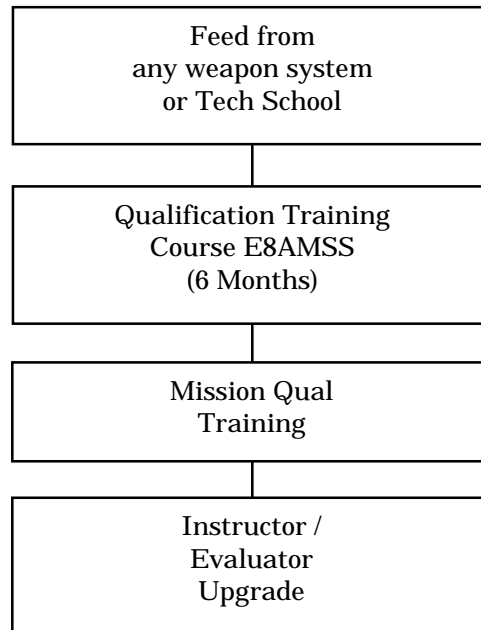


Figure 3

## E-8 JSTARS Training Flow



**Figure 4**

### 1A5X1 Assignment Locations

Location	CMS	SMS	MSG	TSG	SSG	SRA	A1C	Student
Elmendorf AFB AK			x	x	x	x	x	
Geilenkirchen AB GE		x	x	x	x			
Kadena AB JA	x		x		x	x	x	
Keesler AFB MS			x		x			
Kirtland AFB NM			x					
Langley AFB VA	x							
Melbourne, FL				x	x			
Robins AFB GA	x	x	x	x	x	x	x	x
Seattle, WA			x	x				
Shape, Belgium		x						
Sheppard AFB TX						x		
Tinker AFB OK	x	x	x	x	x	x	x	x
USMTM Saudi Arabia				x				

**Figure 5**

NOTE: The authorizations listed above are subject to change without notice. Crewmembers interested in assignments to locations listed should consult their MAJCOM functional manager or the AFPC resource manager for more detailed information about requirement for a specific location.

## ***Section C - Skill Level Training Requirements***

**9. Purpose.** Skill level training requirements in this specialty are defined in terms of tasks and knowledge requirements. This section outlines the specialty qualification requirements for each skill level in broad, general terms and establishes the mandatory requirements for entry, award, and retention of each skill level. The specific task and knowledge training requirements are identified in the STS at Part II, Sections A and B of this CFETP.

### **10. Specialty Qualifications:**

#### **10.1. Apprentice Level Training:**

##### **10.1.1. Specialty Qualification.**

**10.1.1.1. Knowledge.** Knowledge is mandatory of: airborne radar and computer systems; mission systems forms and reports; electronic principles, principles of computers, networking, basic software structure, principles of radio frequency (RF) as applied to basic radar and weapons systems; capabilities, limitations, operations, and functions of electronic test equipment; binary, octal, and hexadecimal numbering systems; interpreting technical orders, logic diagrams, and processed data lists; general purpose computers and peripheral units; software diagnostic routines; and maintaining airborne weapons systems and ancillary systems.

**10.1.1.2. Education.** For entry into this specialty, completion of high school or general educational development equivalency is mandatory. Also, completion of courses in physics, computer principles, and mathematics is desirable.

**10.1.1.3. Training.** Completion of the E3ABR1A531 course at Keesler AFB, MS. Weapons systems resources, simulators and trainers at the operational bases will be used to provide performance/proficiency training according to qualification requirements.

**10.1.1.4. Other.** The following are mandatory as indicated:

**10.1.1.4.1.** For entry into this specialty, normal color vision as defined in AFI 48-123, *Medical Examination and Standards*.

**10.1.1.4.2.** For entry, award, and retention of these AFSCs:

**10.1.1.4.2.1.** Physical qualification for aircrew duty according to AFI 48-123, *Medical Examination and Standards*.

**10.1.1.4.2.2.** Qualification for aviation service according to AFI 11-402, *Aviation And Parachutist Service, Aeronautical Ratings and Badges*.

**10.1.1.4.3.** For award and retention of AFSC 1A531/51/71/91/00, eligibility for Secret security clearance according to AFI 31-501, *Personnel Security Management Program*.

**10.1.2. Training Sources and Resources.** Completion of the course E3ABR1A531 at Keesler AFB, MS satisfies the knowledge and training requirements specified in the specialty qualification section (above) for award of the 3-skill level. Completion of Combat Survival Training Course (S-V80) and Water Survival Non-parachuting (S-V90) is mandatory for all 1A5x1 personnel.

**10.1.3. Implementation.** Entry into training is accomplished through initial accessions from BMTS or through retraining from any AFSC. After graduation from course E3ABR1A531 IQT starts when an individual is assigned to their first duty position. Thereafter, upgrade training is initiated anytime an individual is assigned duties they are not qualified to perform. QTPs will be used concurrently to obtain necessary duty positions qualification.

## 10.2. Journeyman Level Training:

10.2.1. **Specialty Qualification.** All qualifications for AFSC 1A531 apply to the 1A551 requirements.

10.2.1.1. **Knowledge.** In addition to knowledge required for the 3-level and other qualifications as listed above, an individual must possess the knowledge and skills necessary to operate and maintain airborne mission specialty systems. Completion of qualification criteria in current assigned aircraft is mandatory.

10.2.1.2. **Education.** To assume the rank of SSgt, individuals must be a graduate of the Airman Leadership School (ALS).

10.2.1.3. **Training.** Completion of 1A551 CDCs is mandatory for award of the journeyman AFSC.

10.2.1.4. **Experience.** Qualification and possession of AFSC 1A531.

10.2.1.5. **Other.** See paragraph 10.1.1.4.

10.2.2. **Training Sources and Resources.** Completion of CDC 1A551 satisfies the knowledge requirements specified in the specialty qualification section (above) for award of the 5-skill level. The STS identifies all core tasks required for qualification. Upgrade and qualification training are provided by qualified trainers using available QTPs written for the duty position, program to be managed, or equipment to be used. QTPs are Air Force publications and are mandatory for use when available for a duty position, program, or piece of equipment. They are obtained through normal publication channels in accordance with the procedures in AFIND 8. Procedures for requesting development of QTPs to support training is contained in AFIND 8. A list of training courses and QTPs is at Part II, Sections A and B, respectively, of this CFETP. Requests for qualified trainers should be directed to your base training manager.

10.2.3. **Implementation.** Entry into upgrade training is initiated when an individual possesses the 3-skill level. Qualification training is initiated anytime an individual is assigned duties they are not qualified to perform. Complete CDC 1A551 and QTPs before awarding the 5-skill level.

## 10.3. Craftsman Level Training:

10.3.1. **Specialty Qualification.** All 1A531/51 qualifications apply to the 1A571 requirements.

10.3.1.1. **Knowledge.** In addition to knowledge required for the 5-skill level and other qualifications as listed above, an individual must possess the knowledge and skills necessary to supervise personnel, and operate and maintain Airborne Mission Systems Specialty.

10.3.1.2. **Education.** To assume the ranks of SSgt and MSgt, individuals must be graduates of the Airman Leadership School (ALS) and NCO Academy, respectively.

10.3.1.3. **Training.** Completion of 1A551 CDCs (or holds a 5-skill level in the AFSC) and 18 months OJT (12 months for retrainees) is required.

10.3.1.4. **Experience.** Qualification and possession of AFSC 1A551.

10.3.1.5. **Other.** See paragraph 10.1.1.4.



**10.3.2. Training Sources and Resources.** The STS identifies all tasks required for qualification. Upgrade and qualification training are provided by qualified trainers using available QTPs written for the duty position, program to be managed, or equipment to be used. QTPs are Air Force publications and are mandatory for use when available for a duty position, program, or piece of equipment. They are obtained through normal publication channels in accordance with the procedures in AFIND 8. Procedures for requesting development of QTPs to support training are contained in AFIND 8. A list of training courses and QTPs is at Part II, Sections A and B, respectively, of this CFETP.

**10.3.3. Implementation.** Entry into upgrade training is initiated when an individual possesses the 5-skill level and is in the grade of SSgt. Qualification training is initiated anytime an individual is assigned duties they are not qualified to perform. All QTPs must be completed for award of the 7-skill level.

#### **10.4. Superintendent Level Training:**

##### **10.4.1. Specialty Qualifications.**

**10.4.1.1. Knowledge.** Knowledge is mandatory of airborne mission systems operations, administrative techniques, aircrew personnel management, staff functions, budgeting, scheduling, training development, inspections, and standardization and evaluations, aircrew management principles and supervisory techniques; radar fundamentals and the operational characteristics of airborne mission, surveillance, and mission systems; target detection and tracking functions; interpreting computer-generated console situation and tabular displays; electronically generated data; using identification procedures; performing electronic counter countermeasures functions; passing, receiving, and interpreting data link information; using communications systems; emergency procedures and equipment; maintenance publications; performing emergency action procedures and conducting theater air activities.

**10.4.1.2. Education.** To assume the grade of CMSgt, individuals must be a graduate of the USAF Senior NCO Academy (or sister service Senior Academy) in-residence.

**10.4.1.3. Training.** Completion of all training tasks is mandatory.

**10.4.1.4. Experience.** Qualification and possession of AFSC 1A571.

**10.4.1.5. Other.** See paragraph 10.1.1.4.

**10.4.2. Training Sources and Resources.** The STS identifies all tasks required for qualification in the individual's duty position. Upgrade and qualification training are provided by qualified trainers using available QTPs written for the duty position, program to be managed, or equipment to be used. QTPs are Air Force publications and are mandatory for use when available for a duty position, program, or piece of equipment. They are obtained through normal publication channels in accordance with the procedures in AFIND 8. Procedures for requesting development of QTPs to support training are contained in AFIND 8. A list of training courses and QTPs is at Part II, Sections A and B, respectively, of this CFETP. Requests for qualified trainers should be directed to your base training manager.

**10.4.3. Implementation.** Entry into upgrade training is initiated when an individual possesses the 7-skill level and is in the grade of SMSgt. Qualification training is initiated anytime an individual is assigned duties they are not qualified to perform. All QTPs must be completed for the award of the 9-skill level.

#### ***Section D - Resource Constraints***

**11. Purpose.** This section identifies known resource constraints that preclude optimal/desired training from being developed or conducted, including information such as cost and manpower. Narrative explanations of each resource constraint and an impact statement describing what effect each constraint has on training are included. Also included in this section are actions required, office of primary responsibility, are target completion dates. Resource constraints will be reviewed and updated at least annually.

**12. Apprentice Level Training:** None identified.

**13. Journeyman Level Training:** None identified.

**14. Craftsman Level Training:** None identified.

## Part II

### Section A - Specialty Training Standard

**1. Implementation.** This STS will be used for technical training provided by AETC for classes beginning **7 May 2001**.

**2. Purpose.** As prescribed in AFI 36-2201, this STS:

2.1. Lists in column 1 (Task, Knowledge, and Technical Reference) the most common tasks, knowledge, and technical references (TR) necessary for airmen to perform duties at the 3-, 5-, and 7-skill level in the Airborne Mission Systems Specialty ladder of the Aircrew Operation Career Field. These are based on an analysis of the duties in AFMAN 36-2108. *Items in column 1 with an asterisk (\*) are the tasks/knowledge items that are trained in the resident wartime course.* Column 2 (Core Tasks) identifies, by asterisk (\*), specialty-wide training requirements. NOTE: Core task is minimum qualification training required for upgrade to the 5-skill level, but only pertain to or are a function of the work center assigned.

2.2. Shows formal training and correspondence course requirements. Column 3 shows the proficiency to be demonstrated on the job by the graduate as a result of training (in Course E3ABR1A531 described in the Education and Training Course Announcements (ETCA) formerly AFCAT 36-2223 and the career knowledge provided by the correspondence course. There is no advanced course. See ECI/AFSC/CDC listing maintained by the unit OJT manager for current CDC listings.

2.3. Provides certification for OJT. Column 4 is used to record completion of task and knowledge training requirements. Certification is accomplished as outlined in AFI 36-2201.

2.4. **Qualitative Requirements.** Attachment 1 contains the proficiency code key used to indicate the level of training and knowledge provided by resident training and career development courses.

2.5. Becomes a job qualification standard for on-the-job training and used according to AFI 36-2201. For OJT, the tasks in column 1 are trained and qualified to the go/no go level. Go means the individual can perform the task without assistance and meets local requirements for accuracy, timeliness, and correct use of procedures.

2.6. Is a guide for development of promotion tests used in the Weighted Airmen Promotion System (WAPS). Specialty Knowledge Tests (SKTs) are developed at the USAF Occupational Measurement Squadron by senior NCOs with extensive practical experience in their career fields. The tests sample knowledge of STS subject matter areas judged by test development team members to be most appropriate for promotion to higher grades. Questions are based on study references listed in the WAPS study catalog. Individual responsibilities are in AFI 36-2605.

**3. Recommendations.** Report unsatisfactory performance of individual course graduates to 332 TRS/TRR, 613 Hangar Rd Rm 250, Keesler AFB MS 39534. Reference specific STS paragraphs. Additionally, the training group provides a 24-hour Customer Service Information Line (CSIL) for supervisors to contact the technical training school with any concern they have about a graduate currently assigned to them. The CSIL number for the 81 TRG/TGET (Training Evaluations) is DSN 597-4566; e-mail is [81trg-tget@keesler.af.mil](mailto:81trg-tget@keesler.af.mil); and the FAX is DSN 597-3790.

BY ORDER OF THE SECRETARY OF THE AIR FORCE  
OFFICIAL

Attachment  
Qualitative Requirements

<i>THIS BLOCK FOR IDENTIFICATION PURPOSES ONLY</i>		
<b>NAME OF TRAINEE</b>		
PRINTED NAME <i>(Last, First Middle Initial)</i>	INITIALS <i>(Written)</i>	SSAN
<b>PRINTED NAME OF CERTIFYING OFFICIAL AND WRITTEN INITIALS</b>		
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	

### QUALITATIVE REQUIREMENTS

PROFICIENCY CODE KEY		
	SCALE VALUE	DEFINITION: The Individual
TASK PERFORMANCE LEVELS	1	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (EXTREMELY LIMITED)
	2	Can do most parts of the task. Needs help only on hardest parts. (PARTIALLY PROFICIENT)
	3	Can do all parts of the task. Needs only a spot check of completed work. (COMPETENT)
	4	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (HIGHLY PROFICIENT)
*TASK KNOWLEDGE LEVELS	a	Can name parts, tools, and simple facts about the task. (NOMENCLATURE)
	b	Can determine step by step procedures for doing the task. (PROCEDURES)
	c	Can identify why and when the task must be done and why each step is needed. (OPERATING PRINCIPLES)
	d	Can predict, isolate, and resolve problems about the task. (ADVANCED THEORY)
**SUBJECT KNOWLEDGE LEVELS	A	Can identify basic facts and terms about the subject. (FACTS)
	B	Can identify relationship of basic facts and state general principles about the subject. (PRINCIPLES)
	C	Can analyze facts and principles and draw conclusions about the subject. (ANALYSIS)
	D	Can evaluate conditions and make proper decisions about the subject. (EVALUATION)
<p align="center"><b>EXPLANATIONS</b></p> <p>* A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Examples: b and 1b)</p> <p>** A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks.</p> <p>- This mark is used alone instead of a scale value to show that no proficiency training is provided in the course or CDC.</p> <p>x This mark is used alone in course columns to show that training is required but not given due to limitations in resources.</p>		

Users are responsible for annotating training references (TR) to identify current references pending STS revision

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CD C	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
1. CAREER LADDER PROGRESSION TR: AFMAN 36-2108	*	A/B		B						
2. SECURITY TR: DOD 5200.1-R, AFI 31-401										
2.1. Safeguarding Sensitive and / or Classified Information and Equipment		A		-						
2.2. Communications Security (COMSEC) TR: AFI 33-211		A		-						
2.3. Operational Security (OPSEC) TR: AFI 10-1101		A		-						
2.4. Physical Security		A		-						
2.5. Computer Security (COMPUSEC) TR: AFSSI-5102, AFSSM-5019		A		-						
3. AF OCCUPATIONAL SAFETY AND HEALTH (AFOSH) PROGRAM TR: AFIs 91-301 & 302, AFOSH Standard 91-66										
3.1. Hazards Associated with AFSC 1A5X1		A		B						
3.2. AFSC 1A5X1 AFOSH Standards	*	A		B						
3.3. Flightline Safety	*	A		B						
3.4. Precautions Handling Electronic Equipment (Including Electrostatic Discharge)	*	1b		B						
4. SUPERVISION TR: DOD 5500-7, AFIs 36-2403, 36-3627										
4.1. Orient New Personnel		-		-						
4.2. Assign Personnel to Duty Position TR: AFI 21-101		-		-						
4.3. Coordinate Maintenance with Other Agencies TR: AFI 21-101		-		-						
4.4. Establish: TR: AFI 21-101										
4.4.1. Mission priorities		-		-						
4.4.2. Work methods		-		-						
4.4.3. Performance standards		-		-						
4.4.4. Requirements		-		-						
4.5. Evaluate Work Performance TR: AFMs 36-2108, 36-2241 V1		-		-						

1.  TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2.  Core Task	3.					4. CERTIFICATION OF OJT			
		Proficiency codes used to indicate training / information provided					A	B	C	D
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level				
		(1) CRS	(2) CD C	(1) CRS	(2) CDC	(1) OJT				
4.6. Interpret Policies, Directives, or Procedures TR: AFM 36-2241V1		-		-						
4.7. Counsel Subordinates TR: AFI 36-2618		-		-						
4.8. Prepare:										
4.8.1. Awards and decorations TR: AFIs 36-2803, 2805, 2807, 2864		-		-						
4.8.2. Enlisted Performance Reports TR: AFI 36-2403		-		-						
4.8.3. Correspondence TR: AFM 36-2241V1		-		-						
4.8.4. Schedules		-		-						
4.9. Implement:		-								
4.9.1. Safety directives-procedures TR: AFIs 91-202, 91-204, 91-207		-		-						
4.9.2. Security directives-procedures TR: AFIs 31-401, 71-101 V1, AFJI 31-401		-		-						
5. TRAINING TR: AFIs 36-2201, AFI 11-202V1, AFMANs 36-2108, 36-2245										
5.1. Plan Training		-		-						
5.2. Conduct Training		-		-						
5.3. Evaluate Trainee Progress		-		-						
5.4. Maintain Training Records		-		-						
5.5. Evaluate Training Programs		-		-						
6. FLIGHT MANAGEMENT										
6.1. Function of HOSM TR: AFIs 11-401, 402, 206	*	A		B						
6.1.1. Aircrew requirements TR: AFI 11-2E-3/TC-18 Vol 1, and AFI 11-2E8 Vol 1	*	A		B						
6.1.2. Aircrew standardization/evaluation TR: AFI 11-202 Vol 2	*	A		B						
7. PUBLICATIONS TR: AFPD 21-3, AFI 11-215, T.O.s 00-5-1, 00-5-2, 1E-3A-43-1-1, 1E-8C-43-1-1, 552ACWHBs Vol IV & V, and 93ACWHB 55-1 Vol II & IV										
7.1. Air Force Technical Order System	*	A								

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CD C	(1) CRS	(2) CDC	(1) OJT				
							Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
7.2. Publication Deficiencies	*	A								
7.3. Flight Publications	*	A								
7.4. Electronic Formatted Technical Order System	*	A		-						
8. AIRCRAFT FORMS TR: T.O. 00-20-5										
8.1. Use AFTO Form 781	*	1b								
* 9. BASIC ELECTRONIC PRINCIPLES TR: T.O. 31-1-141 series										
9.1. Basic Terms TR: T.O.s 31-1-141-2, -5										
9.1.1. Metric notation	*	B		B						
9.1.2. Direct Current (DC) terms	*	B		B						
9.1.3. Alternating Current (AC) terms	*	B		B						
9.2. Basic Circuit Operation TR: T.O.s 31-1-141-2, -9	*	B		B						
9.3. Resistor Operation TR: T.O.s 31-1-141-2, -9	*	A		B						
9.4. Relays and Solenoids TR: T.O.s 31-1-141-2, -3	*	A		B						
9.5. Inductor Operation TR: T.O.s 31-1-141-2, -15	*	A		B						
9.6. Capacitor Operation TR: T.O.s 31-1-141-2, -5, -15	*	A		B						
9.7. Transformer Operation TR: T.O.s 31-1-141-2, -5, -15	*	B		B						
9.8. Solid State Diode Operation TR: T.O.s 31-1-141-4, -15	*	B		B						
9.9. Integrated Circuit Operation TR: T.O.s 31-1-141-4	*	A		B						
9.10. Electron Tube Operation TR: T.O.s 31-1-141-2, -3, -9	*	B		B						
9.11. Cathode Ray Tube Operation TR: T.O.s 31-1-141-1, -3	*	B		B						
9.12. Test Equipment TR: T.O.s 31-1-141-1, -7, -8, -9										
9.12.1. Analog multimeter	*	A								
9.12.2. Fast Fourier Transform (FFT)	*	A								

1.  TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2.  Core Task	3.  Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CD C	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
9.12.3. Spectrum analyzer	*	A								
9.13. Transistor Amplifier Circuit Operation TR: T.O.s 31-1-141-1, -4										
9.13.1. Amplifier circuits	*	A		B						
9.13.2. Stabilization circuits	*	A		B						
9.13.3. Coupling circuits	*	A		B						
9.14. Power Supply Circuit Operation TR: T.O.s 31-1-141-4-3, -4, -9, -15	*	A		B						
9.15. Voltage Regulator Operation TR: T.O.s 31-1-141-3, -4	*	A		B						
9.16. Filter Operation TR: T.O.s 31-1-141-2	*	A		B						
9.17. Digital Numbering Conversion TR: T.O.s 31-1-141-5	*	2b		B						
9.18. Digital Logic Functions TR: T.O.s 31-1-141-4,-5	*	B		B						
9.19. Counters and Registers	*	B		B						
9.20. Digital to Analog / Analog to Digital Converter Operation TR: T.O.s 31-1-141-13	*	B		B						
9.21. Transmission Line Operation TR: T.O.s 31-1-141-7,-8, -9,-13	*	A		B						
9.22. Oscillator Operation TR: T.O.s 31-1-141-3,-10,-11	*	A		B						
9.23. Resonant Cavity Operation TR: T.O.s 31-1-141-3, -9,-11	*	A		B						
9.24. Photosensitive Device Operation TR: T.O.s 31-1-141-1, -4	*	A		B						
10. HANDTOOLS										
10.1. Function of Basic Handtools		A		-						
10.2. Use Handtools		1b		-						
11. GENERAL SYSTEMS KNOWLEDGE										
* 11.1. Radar Theory TR: T.O. 31-1-141 series										
11.1.1. System Timer	*	A		B						
11.1.2. Frequency Generator	*	A		B						
11.1.3. Transmitter	*	A		B						



1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CD C	(1) CRS	(2) CDC	(1) OJT				
							Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
11.1.4. Antenna	*	A		B						
11.1.5. Receiver	*	A		B						
11.1.6. Indicator	*	A		B						
11.1.7. Transmit-Receive Processing	*	A		B						
11.1.8. Anomalous Propagation (AP)	*	A		B						
11.2. Types of Radar	*	A		B						
11.3. Electronic Protection (EA/EP)	*	A		B						
* 11.4. Computer Theory TR: T.O.s 31-1-141-6C, 31-1-141-9										
11.4.1. Processors	*	A		B						
11.4.2. Storage / Memory	*	A		B						
11.4.3. Input / Output	*	A		B						
11.4.4. Peripherals	*	A		B						
11.5. Computer Software Architecture										
11.5.1. BIOS	*	A		B						
11.5.2. Operating System	*	A		B						
11.5.3. Applications	*	A		B						
11.6. Network Architecture										
11.6.1. Hardware	*	A		B						
11.6.1.1. Sender	*	A		B						
11.6.1.2. Receiver	*	A		B						
11.6.1.3. Transmission Line	*	A		B						
11.6.2. Software	*	A		B						
11.6.3. Topologies	*	A		B						
11.7. Concepts of Troubleshooting	*	A		B						
12. C4 SYSTEMS EMPLOYMENT	*	A		B						
13. ANCILLARY SYSTEMS										
13.1. Communication Systems		A		-						
13.2. Aircraft Lighting		A		-						
* 13.3. Aircraft Power Distribution	*	B		B						
* 13.4. Mission Systems Cooling	*	B		B						

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CD C	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
* 14. AWACS COMPUTER SYSTEM TR: T.O.s 1E-3A-43-1-1, 1E-3A-2 46-4, 46-5, 1E-3B-2-46-1										
14.1. Data Processing System (DPS)										
14.1.1. Computer arithmetic unit (CAU)	*	B		B						
14.1.2. Digital multiplexer (DMX)	*	B		B						
14.1.3. Computer controller (CC)	*	B		B						
14.1.4. Operator control console (OCC)	*	B		B						
14.1.5. Memory units	*	B		B						
14.2. Peripheral Units	*	B		B						
14.3. Control Power Supply (CPS)	*	B		B						
14.4. Data Display System (DDS)										
14.4.1. Electronic command signal programmer (ECSP)	*	B		B						
14.4.2. Situation display console (SDC)	*	B		B						
14.4.3. Data display indicator (DDI)	*	B		B						
14.5. On-board Test Monitor and Maintenance (OBTM&M)	*	B		B						
14.6. Electronic Support Measures (ESM)		A		-						
* 15. AWACS RADAR SYSTEM TR: T.O.s 1E-3A-43-2-93-1 series, -3 series, 1E-3A-43-1-1, 552ACWHB Vol V										
15.1. Radar Control and Maintenance Panel (RCMP)	*	B		B						
15.2. Data Communications	*	B		B						
15.3. Radar Data Correlator (RDC)	*	B		B						
15.4. Stable Local Oscillator (STALO)	*	B		B						
15.5. Synchronizer (SYNC)	*	B		B						
15.6. Transmitter	*	B		B						
15.7. Antenna Group	*	B		B						
15.8. Analog Receiver	*	B		B						
15.9. Digital Doppler Processor (DDP)	*	B		B						
15.10. Maritime Surveillance Capability Receiver	*	A		B						
15.11. Digital Land Mass Blanking (DLMB)	*	A		B						

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CD C	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
* 16. AWACS IFF SYSTEM TR: T.O.s 1E-3A-43-1-1, 1E-3A-43-2-93-2										
16.1. Antenna Group	*	B		B						
16.2. E-17 Cabinet Components										
16.2.1. Radar target data processor (RTDP)	*	B		B						
16.2.2. Receiver/Transmitters	*	B		B						
16.2.3. Power supplies	*	B		B						
16.2.4. RF transmission line switch	*	B		B						
17. AWACS SYSTEMS INTEGRATION		B		-						
* 18. JOINT SURVEILLANCE TARGET ATTACK RADAR SYSTEM (Joint STARS) TR: T.O.s 1E-8C-43-1-1, 1E-8C-2-99GS-00-1, 93ACWHB 55-1, Vol II, Vol IV										
18.1. Operations and control (O&C)										
18.1.1. System Monitor and Control (SMC)	*	B		B						
18.1.2. Central Data Processor (CDP)	*	B		B						
18.1.3. Memory storage systems (VM <sup>3</sup> )	*	B		B						
18.1.4. Junction boxes	*	B		B						
18.1.5. Operator work station (OWS)										
18.1.5.1. Advanced digital display processor (ADDP)	*	B		B						
18.1.5.2. Graphics display unit (GDU)	*	B		B						
18.1.5.3. OWS embedded disk (OED)	*	B		B						
18.1.5.4. Trackball/Keyboard Assembly		B								
18.1.6. Peripherals	*	A		-						
18.2. Radar										
18.2.1. Radar data processor (RDP)	*	B		B						
18.2.2. Radar control unit (RCU)	*	B		B						
18.2.3. Exciter	*	B		B						
18.2.4. Transmitter group										
18.2.4.1. High power combiner (HPC)	*	B		B						
18.2.4.2. Transmitter	*	B		B						
18.2.5. Antenna Group	*	B		B						

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CD C	(1) CRS	(2) CDC	(1) OJT				
							Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
18.2.6. Receiver A/D	*	B		B						
18.2.7. Signal pre-processor (SPP)	*	B		B						
18.2.8. Pulse compression unit (PCU)	*	B		B						
18.2.9. Programmable signal processor (PSP)	*	B		B						
18.2.10. Radar service request (RSR)/radar products	*	B		B						
18.2.11. Radar operating modes (High, Medium Low)	*	B		B						
18.2.12. Inertial measurement group (IMG)	*	B		B						
18.3. Navigation Systems	*	B		B						
18.4. System Integration	*	B		B						
* 19. SOFTWARE TR: AWACS: T.O.s 1E-3A-43-1-1, 1E-3B-2-46-5, 552ACWHB, Vols IV & V TR: JSTARS : T.O.s 1E-8C-43-1-1, 1E-8C-2-99GS-00-1, 93ACWHB 55-1, Vol II, Vol IV										
19.1. AWACS										
19.1.1. Airborne operational computer program (AOCF)	*	A		B						
19.1.2. Maintenance computer program (MCP)	*	A		B						
19.1.3. Utility programs	*	A		B						
19.1.4. Radar operational program (ROP)	*	A		B						
19.2. Joint Surveillance Target Attack Radar System (JSTARS)										
19.2.1. Operational readiness test (ORT)	*	A		B						
19.2.2. Built-in-test (BIT)	*	A		B						
19.2.3. Diagnostics	*	A		B						
19.2.4. Operating systems	*	A		B						
19.2.5. Joint STARS application system	*	A		B						
19.3. Man Machine Interfaces (MMI)	*	A		B						
* 20. AIRCREW PROCEDURES TR: T.O.s 1E-3A-43-1-1, 1E-8C-43-1-1										
20.1. Mission Planning	*	A		-						
20.2. Preflight Inspections		A		-						
20.3. Outbound		A		-						

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Task	3. Proficiency codes used to indicate training / information provided					4. CERTIFICATION OF OJT			
		A 3-Skill Level		B 5-Skill Level		C 7-Skill Level	A	B	C	D
		(1) CRS	(2) CD C	(1) CRS	(2) CDC	(1) OJT	Start Date	Comp Date	Certify Official's Initials	Trainee's Initials
20.4. Crew Resource Management (CRM)		A		-						
20.5. On-station		A		-						
20.6. Air Refueling		A		-						
20.7. Inbound		A								
20.8. Post-flight Requirements		A								
20.9. Malfunction Analysis, Alternate Procedures Inflight Repair, and General Use Procedures		A		-						
20.9.1. Remove and replacement		1b		-						

## ***Section B - Course Objective List***

### **4. Measurement.**

Each objective is indicated as follows: W indicates task or subject knowledge which is measured using a written test, **PC** indicates required task performance which is measured with a performance progress check, and **PC/W** indicates separate measurement of both knowledge and performance elements using a written test and a performance progress check. **P** indicates performance test only.

### **5. Standard.**

The standard is 70% on written examinations. Standards for performance measurement are indicated in the objective and delineated on the individual progress checklist. Instructor assistance is provided as needed during the progress check, and students may be required to repeat all or part of the behavior until satisfactory performance is attained.

**6. Proficiency Level.** Most task performance is taught to the “2b” proficiency level which means the students can do most parts of the task, but does need assistance on the hardest parts of the task (partially proficient). The student can also determine step by step procedures for doing the task.

**7. Course Objective.** These objectives are listed in the sequence taught by Block of Instruction.

#### **7.1. Initial Skills Course:**

**7.1.1. Block 1. Airborne Mission Systems Specialty Familiarization**

**7.1.2. Block 2. Electronic Principles/Aircraft Systems**

**7.1.3. Block 3. General Computer Theory**

**7.1.4. Block 4. Software/Networking**

**7.1.5. Block 5. General RADAR Theory**

**7.1.6. Block 6. AWACS Mission Systems**

**7.1.7. Block 7. JSTARS Mission Systems**

**7.1.8. Block 8. Aircrew Duties**

## ***Section C - Support Material***

**8.** The following list of support materials is not all-inclusive; however, it covers the most frequently referenced areas.

**NOTE:** This area is reserved.

## ***Section D - Training Course Index***

**9. Purpose.** This section of the CFETP identifies training courses available for the specialty and shows how the courses are used by each MAJCOM in their career field training programs.

**10. Air Force In-Residence Courses.**

<b>COURSE NUMBER</b>	<b>COURSE TITLE</b>	<b>LOCATION</b>
J3AQR1A511 001	Enlisted Aircrew Undergraduate Course	Sheppard AFB
E3ABR1A531	Airborne Mission Systems Apprentice	Keesler AFB
S-V80-A	Combat Survival Training	Fairchild AFB
S-V86-A	Water Survival Training	Pensacola NAS
S-V90-A	Water Survival Training (non-parachuting)	Fairchild AFB

**11. Extension Course Institute (ECI) Courses.**

<b>COURSE NUMBER</b>	<b>COURSE TITLE</b>
CDC 1A551	Airborne Mission Systems Journeyman

***Section E - MAJCOM Unique Requirements*****12. Air Combat Command Courses.**

<b>COURSE NUMBER</b>	<b>COURSE TITLE</b>	<b>LOCATION</b>
E3BQAMSS	E-3 AMSS Initial Qualification	Tinker AFB, OK
E3BQICDMT	E-3 CDMT Instructor Upgrade	Tinker AFB, OK
E3BQIART	E-3 ART Instructor Upgrade	Tinker AFB, OK
ACCAIC100	ACC Academic Instructor Course	Tinker AFB, OK Robins AFB, GA
E8AMSS	E-8 AMSS Qualification Training	Robins AFB, GA
E8MCFI-E-UGT	E-8 AMSS Instructor Upgrade	Robins AFB, GA